

03-21-03 A09:21 IN

Commissioner for Patents, Box PCT Urnted States Patent and Trademark Office Washington, D.C. 20221

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO.

10/019,198 Christopher Gregory Proud 9013-42

INTERNATIONAL APPLICATION NO.

PCT/GB00/02414

I.A. FILING DATE PRIOR

A. FILING DATE PRIORITY DATE 06/21/2000 06/21/1999

20792 MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627

CONFIRMATION NO. 1487 371 FORMALITIES LETTER

OC000000009654948

Date Mailed: 03/18/2003

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Priority Document
- Assignee Statement
- Biochemical Sequence Diskette
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration
- Preliminary Amendments

Applicant's response filed 02/13/2003 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 04/23/2002 have not been completed.

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

• The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- This application does not contain a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(c).
- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- APPLICANT MUST PROVIDE:
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin Software, call (703) 306-2600
 - For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice **MUST** be returned with the response.

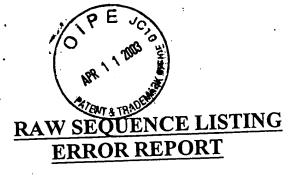
PATRICIA A BOOKER

Telephone: (703) 305-3738

PART 1 - ATTORNEY/APPLICANT COPY

	U.S. APPLICATION NUMBER NO.		INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.	
	10/019,198		PCT/GB00/02414	9013-42	

FORM PCT/DO/EO/916 (371 Formalities Notice)





The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10/019,198
Source:	PCT10
Date Processed by STIC:	316103

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE

APPLICANT, WITH A NOTICE TO COMPLY or,

TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, 3. Hand Carry directly to: Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
 - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

	14/419 198
ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/019,198
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your risk was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 3" amino acid is misangued. Bo not use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentin 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s)missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID:NO:X: (insert SEQ ID:NO where "X" is shown) This sequence is intentionally skipped
8Skipped Sequences (NEW RULES)	Please also adjust the "(ii) NUMBER OF SEQUENCES," response to Include the skipped sequences. Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <10> sequence id number <400> sequence id number <000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10 Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12PatentIn 2.0 "bug"	(See "Federal Register," 00/01/1799, vol. 05, vo
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.
	AMC/MH - Biotechnology Systems Branch - 08/21/2001



Does Not Comply Correct: Needed

PCT10

I ugo I OI V

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/019,198

DATE: 03/06/2003 TIME: 13:10:22

Input Set : A:\9013.42.txt

Output Set: N:\CRF4\03062003\J019198.raw

```
3 <110> APPLICANT: UNIVERSITY COURT OF THE UNIVERSITY OF DUNDEE
    5 <120> TITLE OF INVENTION: USE OF PEPTIDES
     7 <130> FILE REFERENCE: 9013.42
     9 <140> CURRENT APPLICATION NUMBER: US 10/019,198
C--> 10 <141> CURRENT FILING DATE: 2001-12-20
     12 <150> PRIOR APPLICATION NUMBER: PCT/GB00/02414
     13 <151> PRIOR FILING DATE: 2000-06-21
     15 <150> PRIOR APPLICATION NUMBER: GB9914480.0
     16 <151> PRIOR FILING DATE: 1999-06-21
     18 <160> NUMBER OF SEQ ID NOS: 6
     20 <170> SOFTWARE: PatentIn version 3.0
     22 <210> SEQ ID NO: 1
     23 <211> LENGTH: 12
                                     ्रा विकास कर कर अन्य कुला अन्य कुला अन्य किल्ला है। अन्य किल्ला कर किल्ला किल्ला किल्ला किल्ला किल्ला किल्ला क
स्थान
     24 <212> TYPE: PRT
     25 <213> ORGANISM: Homo sapiens
     27 <400> SEQUENCE: 1
29 Lys Lys Arg Tyr Asp Arg Glu Phe Leu Leu Glý Phe
     27 <400> SEQUENCE: 1
            32 <210> SEQ ID NO: 2
     33 <211> LENGTH: 12
      35 <213> ORGANISM: Triticum aestivum
      37 <400> SEQUENCE: 2
     39 Arg Val Arg Tyr Ser Arg Asp Gln Leu Leu Asp Leu
                         5
      40 1
      42 <210> SEQ ID NO: 3
      43 <211> LENGTH: 10
      44 <212> TYPE: PRT
      45 <213> ORGANISM: Homo sapiens
      47 <220> FEATURE:
      48 <221> NAME/KEY: VARIANT
      49 <222> LOCATION: (10)..(10)
      50 <223> OTHER INFORMATION: Xaa REPRESENTS L OR M
      53 <400> SEQUENCE: 3
 W--> 55 Arg Ile Ile Tyr Asp Arg Lys Phe Leu Xaa
      56 1
                                              _ can only be one or the other, not both
      58 <210> SEQ ID NO: 4
       59 <211> LENGTH: 7
                                                      See error summary sheet item 10
       60 <212> TYPE: PRT
  C--> 61 <213> ORGANISM: (Artificial/Unknown)
       63 <220> FEATURE:
       64 <221> NAME/KEY: VARIANT
       65 <222> LOCATION: (2)..(5)
```

DATE: 03/06/2003

TIME: 13:10:22

```
PATENT APPLICATION: US/10/019,198
                    Input Set : A:\9013.42.txt
                    Output Set: N:\CRF4\03062003\J019198.raw
    66 <223> OTHER INFORMATION: Xaa REPRESENTS ANY AMINO ACID
    69 <220> FEATURE:
    70 <221> NAME/KEY: PEPTIDE
    71 <222> LOCATION: (1)..(7)
    72 <223> OTHER INFORMATION: consensus peptide
    75 <220> FEATURE:
    76 <221> NAME/KEY: VARIANT
    77 <222> LOCATION: (7)..(7)
    78 <223> OTHER INFORMATION: Xaa REPRESENTS LEU, MET OR PHE
     81 <400> SEQUENCE: 4
W--> 83 Tyr Xaa Xaa Xaa Xaa Leu Xaa
                    - 5
     84 1
     86 <210> SEQ ID NO: 5
                                             - some enou
     87 <211> LENGTH: 10
C--> 89 <213> ORGANISM: Artificial/Unknown
     88 <212> TYPE: PRT
     91 <220> FEATURE:
     92 <221> NAME/KEY: VARIANT
     93 <222> LOCATION: (1)..(1)
     94 <223> OTHER INFORMATION: Xaa REPRESENTS K OR R
     97 <220> FEATURE:
     98 <221> NAME/KEY: PEPTIDE
     99 <222> LOCATION: (1)..(10)
     100 <223> OTHER INFORMATION: consensus peptide. A distribution of the consensus peptide.
                                                    103 <220> FEATURE:
     104 <221> NAME/KEY: VARIANT
     105 <222> LOCATION: (2)..(3)
     106 <223> OTHER INFORMATION: Xaa REPRESENTS ANY AMINO ACID
     109 <220> FEATURE:
     110 <221> NAME/KEY: VARIANT
     111 <222> LOCATION: (5)..(7)
     112 <223> OTHER INFORMATION: Xaa REPRESENTS ANY AMINO ACID
     115 <220> FEATURE:
     116 <221> NAME/KEY: VARIANT
      117 <222> LOCATION: (8)..(8)
      118 <223> OTHER INFORMATION: Xaa REPRESENTS F OR Q
      121 <220> FEATURE:
      122 <221> NAME/KEY: VARIANT
      123 <222> LOCATION: (10)..(10)
      124 <223> OTHER INFORMATION: Xaa REPRESENTS L OR M
      127 <400> SEQUENCE: 5
 W--> 129 Xaa Xaa Xaa Tyr Xaa Xaa Xaa Leu Xaa
                          5
      130 1
      132 <210> SEQ ID NO: 6
      133 <211> LENGTH: 16
     134 <212> TYPE: PRT
 C--> 135 <213> ORGANISM: (Artificial/Unknown) - Some end
      137 <220> FEATURE:
      138 <221> NAME/KEY: PEPTIDE
```

RAW SEQUENCE LISTING

人名马克 经数据证券的编码 网络海绵

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/019,198

DATE: 03/06/2003 TIME: 13:10:22

Input Set : A:\9013.42.txt

Output Set: N:\CRF4\03062003\J019198.raw

139 <222> LOCATION: (1)..(16)

140 <223> OTHER INFORMATION: penetratin: membrane translocation peptide

143 <400> SEQUENCE: 6

145 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys

146 1

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/019,198 DATE: 03/06/2003 TIME: 13:10:23

Input Set : A:\9013.42.txt

Output Set: N:\CRF4\03062003\J019198.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 10

Seq#:4; Xaa Pos. 2,3,4,5,7

Seq#:5; Xaa Pos. 1,2,3,5,6,7,8,10

VERIFICATION SUMMARY

RY DATE: 03/06/2003 : US/10/019,198 TIME: 13:10:23

PATENT APPLICATION: US/10/019,198

Input Set : A:\9013.42.txt

Output Set: N:\CRF4\03062003\J019198.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0

L:61 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4

L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0

L:89 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5

L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0

L:135 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6